



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Application of:
Somenath Mitra et al.

Group Art Unit: 1711

Application No.: 10/735,989

Examiner: Not Yet Assigned

Filing Date: December 15, 2003

For: Micromachined Heaters For Microfluidic
Devices

INFORMATION DISCLOSURE STATEMENT

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicant respectfully submits this Information Disclosure Statement and a copy of the cited references pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98 in order to comply with the duty of disclosure. The enclosed Form PTO-1449 identifies the references of which Applicant is aware.

The Examiner is respectfully requested to consider the references herein and make them of record in the subject application. It is Applicant's position that the references cited pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98 are clearly not a bar to allowance of the claims in this application.

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: April 15, 2004

Signature: 

Print Name: Timothy X. Gibson

Application No.: 10/735,989

Attorney Docket No.: 436/12

The above-captioned application has not yet received a substantive Office Action, and accordingly it is believed that no fee is necessary. However, should the Patent Office determine that a fee is due, the Commissioner is authorized to charge any such fee to Deposit Account No. 11-0223.

Dated: April 15, 2004

Respectfully submitted,

By 

Timothy X. Gibson

Registration No.: 40,618

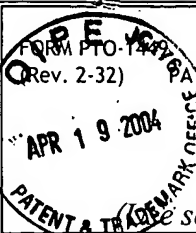
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 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Attach several sheets if necessary)</i>	ATTORNEY DOCKET NO.: 436/12	APPL. NO.: 10/735,989
	APPLICANT: Somenath Mitra et al.	
	FILING DATE: December 15, 2003	GROUP ART UNIT: 1711

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	BA							

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)

CA	A. Friedberger et al.; A Versatile And Modularizable Micromachining Process For The Fabrication Of Thermal Microsensors And Microactuators; Journal of Micromechanics and Microengineering; 9/7/2001; pp. 623-629.
CB	Ivonne Schneegaß, et al.; Miniaturized Flow-Through PCR With Different Template Types In A Silicon Chip Thermocycler; Institute of Physical High Technology; 8/9/2001; pp. 1-16.
CC	John S. Suehle, et al.; Tin Oxide Gas Sensor Fabricated Using CMOS Micro-Hotplates and <i>In-Situ</i> Processing; IEEE Electron Device Letters; Vol. 14, No. 3, March, 1993; pp. 118-120.
CD	*Yukikio Hosoda et al.; Fabrication And Applications Of Polymer-Based Microchannel-Heater Chip As Microreactor; Micro Total Analysis Systems, 2002.
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CF	*Gwi-Y Sang Chung et al.; The Fabrication Of Micro-Heaters With Low-Power Consumption Using SOI And Trench Structures; Metals and Materials International; 2002.
CG	*V. Guarnieri et al.; Low-Power Silicon Microheaters On A Thin Dielectric Membrane With Thick-Film Sensing Layer For Gas Sensor Applications; Microelectronics, Microsystems and Nanotechnology; 2000.
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*ABSTRACT ONLY

EXAMINER	DATE CONSIDERED
<i>EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</i>	

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 2-32) PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use several sheets if necessary)</i>	ATTORNEY DOCKET NO.: 436/12	APPL. NO.: 10/735,989
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OTHER DOCUMENTS *(including Author, Title, Date, Pertinent Pages, Etc.)*

CI	*W. C. Tian et al.; Freestanding Microheaters In Si With High Aspect Ratio Microstructures; Journal of Vacuum Science & Technology, B: Microelectronics and Nanometer Structures; 2002.
CJ	*Tailian Chen et al.; Coalescence Of Bubbles In Nucleate Boiling On Microheaters; International Journal of Heat and Mass Transfer; 2002.
CK	*A. V. Korlyakov et al.; Infrared Microradiator Based On SiC-on Insulator Thin-Film Structures; Journal of Optical Technology; 2001.
CL	*Y. Mo. et al.; Micro-Machined Gas Sensor Array Based On Metal Film Micro-Heater; Sensors and Actuators, B: Chemical; 2001.
CM	*Gwi-Sang Chung et al.; Fabrication Of Pt Microheater Using Aluminum Oxide As A Medium Layer And Its Characteristics; Sensors and Materials; 1998.
CN	*Carole Rossi et al.; Realization And Performance Of Thin SiO ₂ /SiN _x Membrane For Microheater Applications; Sensors and Actuators, A: Physical; 1998.

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